

Amendments to the Specification:

Please amend the Specification as follows:

Delete the paragraph that begins with "FIGURE 1, which comprises...." and located at page 12, lines 1-2 of the Specification and insert at this same location the following two new paragraphs:

"FIGURE 1 shows an elevation view of a joint assembly of the present invention.

FIGURE 1a shows an elevation view of another embodiment of a joint assembly of the present invention."

Replace the paragraph that begins "With reference to FIGURE 1, two joints..." and located at page 12, line 30 to page 13, line 14 of the Specification with the following replacement paragraph:

"With reference to FIGURE 1, an embodiment of a joint~~two joints~~ resistant to fluid leakage in accordance with the present invention is~~are~~ illustrated. As shown in FIG. ~~11-a~~, joint~~Joint~~ 1 serves to connect two hollow members for flow communication therebetween while isolating side "A" of the joint from the opposite side "B" of the joint. Girdle 2, illustrated in section, is a monolithic structure consisting of a material capable of undergoing deformation without rupture. A first rigid member 3 is illustrated as a tubular structure closed at one end with a tapered outer mating surface 13 at a distal end thereof. A second rigid member 4 is illustrated in partial section with an inner mating surface 14. Girdle 2 is disposed between and contiguous with mating surface 13 of rigid member 3 and mating surface 14 of rigid member 4. Differential pressure across the joint, from side "B" to side "A", provides compressive force upon the girdle through the mating surfaces thereby improving resistance to fluid leakage through the joint. Advantageously, the second rigid member comprises a high strength metallic material

capable of being welded. Beneficially, the first rigid member comprises a nonmetallic material, for example, a glass, porcelain, or ceramic."

Replace the paragraph that begins "As shown in FIG. 1-b, Joint 2 serves..." and located at page 13, lines 15-29 of the Specification with the following replacement paragraph:

"As shown in FIG. 1-a1-b, ~~joint~~Joint 21 ~~[[2]]~~ serves to connect two hollow members for flow communication therebetween while isolating side "A" of the joint from the opposite side "B" of the joint. Girdle 22, illustrated in section, is a monolithic structure consisting of a material capable of undergoing plastic deformation without rupture for best results. A first rigid member 5 is illustrated as a tubular structure closed at one end with a tapered outer mating surface 23 at a distal end thereof. A second rigid member 6 is illustrated in partial section with an inner mating surface 24. Girdle 22 is disposed between and contiguous with mating surface 23 of rigid member 5 and mating surface 24 of rigid member 6. Differential pressure across the joint, from side "A"["B"] to side "B"["A"], provides compressive force upon the girdle through the mating surfaces thereby improving resistance to fluid leakage through the joint."

Please replace the section headed "ABSTRACT" and located on page 39 of the Specification with the following:

"ABSTRACT

A composite joint ~~Composite joints~~ for gas-tight members constructed of materials that exhibit different coefficients of thermal expansion is used for supporting a membrane material in a reactor~~are disclosed~~. Broadly, the apparatus of ~~the invention~~ provides composite joints which include a girdle of a resilient material disposed between mating surfaces of a high strength metallic member and a nonmetallic member in an arrangement wherein a difference in fluid pressures across the joint provides compressive force upon the girdle through tapered mating surfaces thereby improving resistance to fluid leakage. The composite~~Composite joints of the~~

invention are particularly useful for joining a high strength weldable metallic conduit and a gas-tight ceramic member having a tubular structure, closed at one end, with a tapered mating surface at a distal end thereof contiguous with a portion of the girdle. Processes using such joints include those which convert methane into synthesis gas.

~~Processes beneficially using joints in accordance with the invention include converting methane gas into value-added²⁰ products, for example, production of synthesis gas comprising carbon monoxide and molecular hydrogen. , Advantageously, the synthesis gas is free of deleterious and/or inert gaseous diluents such as nitrogen."~~

A copy of the replacement Abstract, in both marked and clean versions, is attached hereto.